



British Columbia Institute of Technology

BCIT Safety Manual

APPENDIX A- PLANNED MAINTENANCE



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1. Purpose

This Exposure Control Plan is designed to minimize employee, student, contractor, and visitor exposure to wood dust at BCIT, to eliminate fire and tripping hazards due to the accumulation of wood dust in the workshops, and to ensure compliance with applicable WorkSafeBC regulations.

This document is an appendix to the BCIT Wood Dust Exposure Control Plan. This document is not a stand-alone Exposure Control Plan, but builds upon the BCIT Wood Dust Exposure Control Plan to give specific details of the Planned Maintenance (PM) schedule that the Facilities Maintenance group will perform.

3. Roles and Responsibilities

Please see the BCIT Wood Dust Exposure Control Plan for the general roles and responsibilities at BCIT for controlling exposures to wood dust.

3.1 Facilities Maintenance

Facilities Maintenance is responsible for issuing work orders and ensuring that the PM work is completed as outlined in Section 5 of this document.

3.2 Departments

Each of the effected departments is required to ensure that the PM Schedule outlined in Section 5 of this document is adequate for controlling dispersal and accumulation of wood dust in their area.

4. Procedures

4.1 HVAC (Heating, Ventilation, and Air Conditioning)

DUST EXTRACTOR – QUARTERLY PM PROCEDURE

(work orders generated the last week of March, June, September, and December)

Attention Foreman/Supervisor: contact school in advance of service to advise of customer impact.

SAFETY PRECAUTIONS:

1. Wear Personal Protective Equipment for Dust Exposure (including N-95 respirators and safety goggles, skin protection: PPE standards section 4.3.4 of guiding document)
2. Follow Confined Space Procedures for Changing Bags.
3. Fall Protection where appropriate.
4. Contractors shall adhere to BCIT Contractor Safety Guidelines.

WORK PROCEDURES:

1. Lubricate motors/bearings as required.
2. Check all filter tubes for wear.



3. Check gate slides for ease of movement.
4. Check belts, pulleys, and sheaves. Tighten and/or replace as required.
5. Check and lubricate shaker mechanism.
6. Inspection: door hardware.
7. Check flux connectors.
8. Bin seals and clamps; repair/replace as required.
9. Check all interior ducting connections.

DUST EXTRACTOR – ANNUAL PREVENTIVE MAINTENANCE PROCEDURE

(work orders generated in July of each year)

Attention Foreman/Supervisor: contact school in advance of service to advise of customer impact.

SAFETY PRECAUTIONS:

1. Wear Personal Protective Equipment for Dust Exposure (including N-95 respirators and safety goggles, skin protection: PPE standards section 4.3.4 of guiding document)
2. Follow Confined Space Procedures for Changing Bags
3. Fall Protection where appropriate.
4. Contractors shall adhere to BCIT Contractor Safety Guidelines.

WORK PROCEDURES:

1. Lubricate all electric motors.
2. Lubricate bin door slides, door hardware, hinges, etc.
3. Remove and dry clean all filter tubes as required.
4. Check all electrical connections at disconnect and motors and switches.

4.2 PLUMBING PROCEDURES:

GAS-U-TUBE HEATERS – ANNUAL PM PROCEDURE

(work orders generated in October of each year)

Attention Foreman/Supervisor: contact school in advance of service to advise of customer impact.

SAFETY PRECAUTIONS:

1. Wear Personal Protective Equipment for Dust Exposure (including N-95 respirators and safety goggles, skin protection: PPE standards section 4.3.4 of guiding document)
2. Dust & dirt is to be removed by a combination of power vacuum method using a shop vacuum with a fine dust filter or HEPA filter, and focused compressed air combined with local extraction from a shop vacuum.

WORK PROCEDURES:

1. Check/test automatic control/start/stop.



2. Check for gas leaks and products of combustion.
3. Check gas controls and interlocks for proper operation.
4. Confirm proper operation of burner/combustion control.
5. Check Fan and Motor for cleanliness.
6. Clean unit of dust and debris/soot at vent.
7. Repair deficiencies as required.
8. Note all major deficiencies that cannot be completed during this routine.

4.3 ELECTRICAL PROCEDURES

HIGHVOLT-A-N – BI-ANNUAL PREVENTIVE MAINTENANCE PROCEDURE

(work orders generated in July of each year)

Attention Foreman/Supervisor: contact school in advance of service to advise of customer impact.

SAFETY PRECAUTIONS:

1. Wear Personal Protective Equipment for Dust Exposure (including N-95 respirators and safety goggles, skin protection: PPE standards section 4.3.4 of guiding document)
2. Dust & dirt is to be removed by a power vacuum method using a shop vacuum with a fine dust filter or Hepa Filter.

WORK PROCEDURES:

1. Locate mag-starters/light sensors.
2. Remove covers
3. Vacuum enclosures
4. Check connections
5. Check contacts/spray clean
6. Service stop/start buttons
7. Vacuum dust from motor
8. Remove lockout
9. Check operation

4.4 CUSTODIAL PROCEDURES:

HIGH AREA CLEANING (above 14 feet) – SEMI-ANNUAL PM PROCEDURE

(NE2/NE4 work orders generated in December & June)

Attention Foreman/Supervisor: contact school in advance of service to advise of customer impact.

SAFETY PRECAUTIONS:

1. Wear Personal Protective Equipment for Dust Exposure (including N-95 respirators and safety



goggles, skin protection: PPE standards section 4.3.4 of guiding document)

2. Dust & dirt is to be removed by a power vacuum method using a shop vacuum with a fine dust filter or Hepa Filter.
3. Contractors shall adhere to BCIT Contractor Safety Guidelines.

WORK PROCEDURES:

1. Remove dirt/dust accumulations from all ledges, vents, ducts, beams, space heaters, and any other horizontal surfaces.
2. Areas where a vacuum system is not feasible or practical, surfaces such as lighting will be dusted with static dusters or damp wipe method. Damp wipe method not to be performed on space heaters or any teaching equipment.
3. If damp wipe method is used, caution must be taken that equipment in the shops is not touched with any water. Protection of equipment is to be provided by contractor.
4. Any airborne dust or settlement accumulated while cleaning shall also be removed. Note: Some dust particles may take up to 2 days to settle.
5. Remove dust from all walls with cladding floor to ceiling, including roll up doors.
6. Wash interior & exterior of glass above or extending above 14ft.

LOW AREA CLEANING (below 14 feet) – SEMI-ANNUAL PM PROCEDURE

(NE2/NE4 work orders generated in December & June)

Attention Foreman/Supervisor: contact school in advance of service to advise of customer impact.

SAFETY PRECAUTIONS:

1. Wear Personal Protective Equipment for Dust Exposure (including N-95 respirators and safety goggles, skin protection: PPE standards section 4.3.4 of guiding document)
2. Dust & dirt is to be removed by a power vacuum method using a shop vacuum with a fine dust filter or Hepa Filter.
3. Contractors shall adhere to BCIT Contractor Safety Guidelines.

WORK PROCEDURES:

1. Vacuum/dust all ledges, vents, ducts, beams and any other horizontal surfaces with dirt/dust accumulations. Where dirt cannot be removed with vacuuming or dusting, damp wiping is required.
2. Remove dust/dirt from exterior of all pipes, ducts & ventilation hoods up to a height of 14ft. Remove dust from all wall surfaces.
3. Remove floor drain cover plates & clean dust/debris.
4. Wash interior & exterior of all glass, including rollup doors.
5. Equipment/machines on shop floor to be dusted with static duster only.
6. Vacuum shop floors.



7. Dust extractor ventilation system to be turned on during cleaning process.
8. The use of a scissor lift is to be performed while cleaning high surfaces where possible, otherwise the use of ladders where not feasible or practical. Follow WorkSafeBC regulations.
9. Signs to be posted on all entry/exit doors and doors locked to restrict unprotected entry.
10. Cleaning inspections with BCIT Custodial Supervisor to take place immediately after completion. Any deficiencies to be completed in 3 days.

DAILY CLEANING OF NE2/NE4

WORK PROCEDURES:

1. Washrooms (includes cleaning of all fixtures and floors)
2. Wash-up area (floor, fixtures, paper/soap dispensers)
3. Lunch room/meeting room (includes floor cleaning, wiping of tables chairs, fixtures and boards within in the room)
4. Stairs leading up to 2nd floor offices
5. Entrances into shops, floors, and garbage containers

Tuesday/Friday (2x a week)

Individual offices - garbage removal, floor vacuumed

Weekly

Sweeping/vacuuming of shop stairs leading up to storage areas

DAILY INSPECTION/EMPTYING OF DUST EXTRACTOR BIN – EMPTYING AS REQUIRED

Attention Distribution Supervisor/Machine Operator: inspect bins daily for waste removal activity

SAFETY PRECAUTIONS:

1. Wear personal protective equipment for dust exposure (including N-95 respirators and safety goggles, skin protection: PPE standards section 4.3.4 of guiding document)
2. Machine Operator equipment as required including safety vest, boots and hearing protection as appropriate
3. Ensure extractor is not operational.

WORK PROCEDURES:

1. Check extractor bin through portal
2. If $\frac{3}{4}$ full, remove “C” clamps and change over bin
3. Fasten “C” clamps and move full bin(s) to NW corner of NE2

Extractor locations:



NE2 - 3 at West Side & 1 at East Side

NE4- 1 at West Side & 1 at East Side

NE1- 1 at South Side

5. Documentation

Facilities maintenance must maintain all related documentation for 3 years per BCIT policy.

6. Program Review

The annual review will be done in consultation with the Joint Occupational Health and Safety Committee.